

BULLO-DONG ANCIENT PARK

Unveiling Prehistoric Korean Landscape Engineering and Stone Architecture



Bullo-Dong Ancient Park - Daegu, South Korea (2025)

Abstract

This study presents a detailed examination of the human-modified platform ridge, unmarked water basin and bedrock layers at Bullo-Dong Ancient Park, integrating geological, archaeological, and environmental data. The research focuses on the platform's edge, particularly the stone exposures, the water basin structure and function and bedrock layering while interpreting them within the context of early Korean settlement practices.

Keywords

Bullo-Dong Ancient Park archaeology, ancient Korea stone platforms, Silla era landscape engineering, Korean tumuli water basin, ancient Korean stonework, dry-stacked stone basin Korea, early Korean hydrology, ritual purification basins Korea, non-monumental archaeology Korea, Bullo-Dong platform ridge, ancient Korean terrace construction, geological foundations of Silla mounds, Atlantis-Silla comparative study, ancient water management Korea, proto-architecture Korea, prehistoric Korean landscapes, archaeology of everyday infrastructure Korea

Bullo-Dong Ancient Park – Platform Ridge and Stone Exposure Analysis



Photo taken on November 13 2025

Date: 2025-11-13

Coordinates: 35°54'42.43"N, 128°38'49.72"E

Project: Atlantis–Silla Cross-Cultural Engineering Study

Overview

This section documents a human-modified platform ridge at Bullo-Dong Ancient Park, integrating on-site photography, geological context, and multi-temporal satellite imagery (2003–2024). The analysis focuses on stone exposures along the platform edge and their relationship to landscape engineering practices in early Korean settlement contexts.

Geological Context

The Bullo-Dong area sits within formations dominated by Cretaceous sedimentary and volcanoclastic rocks, often metamorphosed into slate- or phyllite-like material. These lithologies naturally fracture along bedding planes, producing tabular, block-like stones with rectilinear geometry. Such natural properties strongly influence how stone appears when exposed or reused in human-modified terrain.

Satellite imagery from 2003 and 2024 shows a persistent, flattened ridge with a stable outline over at least two decades. The platform exhibits:



2003



2024

- Clear breaks in slope above and below the ridge
- A relatively straight, continuous edge line
- Recurrent stone exposures along that edge

The consistency of the ridge geometry across time rules out recent park construction or modern agricultural terracing and supports interpretation as an older, anthropogenically shaped landform.

Stone Characteristics



Photo taken on November 13 2025

Ground-level photography reveals stones that are:

- Horizontally bedded
- Tabular and block-like, with angular edges
- Exhibiting surface lamination and weathering with possible clear tool marks

Some stones display recesses or irregular corner losses. These features could align with post-depositional processes such as root pressure, moisture cycling, and preferential erosion along bedding planes, or deliberate carving or joinery.

Interpretation

The platform ridge is best understood as a human-shaped landscape feature, not a monumental stone structure. The stones likely functioned as:

- Edge stabilizers for a terrace or flattened activity surface



Photo taken on November 13 2025

- Load-spreading elements along a cut slope
- Reused natural blocks selected for favourable geometry

This pattern is consistent with early settlement, agricultural staging, or boundary-related earthworks rather than elite or ceremonial architecture.

Temporal Analysis (2003–2024)

Comparison of satellite imagery over a 21-year span shows increased vegetation cover but no significant alteration to the platform's form. Soil cycling appears to intermittently expose and re-bury stones in approximately the same positions, supporting the interpretation that stones are being revealed by environmental processes rather than newly placed.

Conclusion

The Bullo-Dong platform represents proto-architectural landscape engineering: human modification of terrain using minimally altered local stone. While lacking evidence for advanced stone-working, the site provides valuable insight into how early communities interacted with geology to create stable, functional ground surfaces. This quiet, practical manipulation of landscape forms an important counterpart to more symbolic or monumental sites elsewhere in Korea.

Research Significance

Including this analysis strengthens the broader Ancient Korea research corpus by documenting non-monumental human activity—an often underrepresented but essential component of early historical landscapes.



Along the ridge, on the right by the tree, a squared stone has been shifted upwards out of place by tree growth.

Bullo-Dong Ancient Water Basin

Unregistered Stone-Lined Basin Feature

Date: 2025-11-13

Coordinates: 35°54'48"N, 128°39'02"E

Project: Atlantis-Silla Cross-Cultural Engineering Study



Photo taken on November 13 2025

Description of Feature

At the above coordinates, southeast of the main tumuli belt, an unmarked stone-lined basin is partially buried within dense vegetation. The structure is semicircular and composed of dry-stacked metamorphic/shale stones showing advanced weathering and differential fracturing. Soil creep, root intrusion, and erosion patterns suggest the feature has been undisturbed for decades, possibly centuries.

The basin currently holds stagnant water with seasonal leaf accumulation. The geometry and intentional walling confirm anthropogenic origin rather than a natural depression.

Preliminary Interpretation

The architecture corresponds to several functional categories found in Korean historical landscapes:



Photo taken on November 13 2025

1. Ritual Purification Basin (제정 / Jejeong):
In Silla-era ceremonial environments, small stone basins near burial clusters were used for hand-washing or ritual cleansing. The proximity to tumuli supports this ritual reading.
2. Construction/Worker Utility Well:
Large mound projects required localized water sources for builders and guardians. A small basin such as this fits the infrastructural footprint associated with mound construction.
3. Runoff/Drainage Management Feature:
Mound-builders engineered micro-drainage systems to protect mounds from erosion and infiltration. This basin's position on a slope makes it plausible as a runoff catchment, slowing flow during heavy rain.

The absence of modern cement or regular industrial stone-cutting strongly suggests pre-modern construction, though precise dating requires comparative stone analysis.

Atlantis–Silla Comparative Insight

This feature resonates strongly with hydrological concepts found in early maritime civilizations:

- The dry-stack engineering mirrors techniques used by Minoan, Cycladic, and pre-diluvian Atlantic-coded cultures where flexibility and seismic tolerance were essential.
- The integration of water, ritual boundary zones, and funerary architecture aligns with global mythic logic:
water as the medium between worlds, purification as a technological threshold.
- Its hidden, utilitarian design echoes the Atlantic tradition of embedding small but essential hydrological nodes within ceremonial landscapes—micro-engineered elements supporting macro-sacred structures.

Bullo-Dong continues to reveal how Silla hydrological practice fits inside the broader inheritance of ancient water-engineering knowledge distributed across early Eurasian and proto-Atlantic networks.

A few clues jump out:

1. The dry-stack technique

No cement. No mortar. Stones stacked tight, wedge-shaped, fitted by hand. That's consistent



Photo taken on November 13 2025

with traditional Korean stonework used for wells, retaining basins, drainage pits, and ritual water points.

2. The curvature

Look at how the wall curves—this is deliberate architecture, not random rock collapse. A natural rock formation wouldn't form this semicircle.

3. Its position near tumuli

Near old mounds, you'd often find:

- ritual water basins
- small wells for workers/guardians
- drainage structures to divert water away from mounds

- stone-lined ritual purification pools (제정 / jejeong)

Given the location at Bullo-Dong Ancient Park, it's extremely plausible this was once part of the support infrastructure for mound maintenance or construction, or a ritual water feature.

But it's not "modern."

Modern stones would be:

- smooth cut
- uniform size
- symmetrical
- set with concrete

These are weathered metamorphic or shale stones, traditional, fractured by time, and very uneven.

How old could it be?

Without excavation or site records, you can't put a number on it—but the style suggests:

- Joseon era at least
- Possibly Goryeo
- If connected to the tumuli structures, could even reach late Three Kingdoms / Silla period

The important thing:

It's absolutely not just random rocks; it's human-made.

What was it for?

Most likely one of these:

1. A water collection pit for ritual purification

Before approaching mounds, workers and ritual participants washed hands in stone-lined pits. Many Korean sites have them.

2. An old agricultural or habitation-era well

Before the park existed, villagers lived around these hills for centuries.

3. A drainage basin for protecting the tumuli

These hills were engineered; controlling water runoff was important so that mound chambers wouldn't flood.

Ditch-to-Basin Relationship



Photo taken on November 13 2025

Interpretation:

- The linear stones indicate a shallow ditch guiding water downslope.
- Vegetation patterns suggest intermittent flow.
- The alignment points toward a small basin-like stone cluster documented earlier.



Photo taken on November 13 2025

- Likely function: runoff control, water gathering, or low-intensity ritual washing/cleansing channel.

Stone-Line Ditch Feature

A narrow linear depression lined with small fractured stones runs downslope toward the main water basin. The stones follow a loose alignment, suggesting natural erosion enhanced by repeated water flow rather than human construction. Its position matches the drainage path indicated in the earlier observations, confirming it funnelled runoff directly into the basin below.

Bullo-Dong Field Note – Bedrock Layer at Mound Summit



Photo taken on November 13 2025

Date: 2025-11-13

Coordinates: 35°54'47.12"N, 128°38'53.53"E

Project: Atlantis–Silla Cross-Cultural Engineering Study

Summary

At the summit area of the Bullo-Dong Ancient Park — the highest point of the site — a continuous exposure of pale grey-green bedrock is visible beneath the burial mounds. This stone layer is ancient, predating all human activity in the region. Several slabs were found naturally splitting along existing fracture lines. A single thin slab was collected for geological reflection (not an artifact, not shaped by human hands).

The stone surface beneath the Bullo-Dong mounds is sedimentary bedrock, probably shale or slate.

Over time, that type of rock develops:

- polygonal cracking
- rectangular jointing
- thin plates that peel upward

This happens because shale is deposited in layers and then weathered over thousands of freeze–thaw cycles.

But here’s the part that actually matters:

The bedrock photographed is exposed directly under the burial mound slope

That means:

1. The mound builders selected this hill because it was bedrock-stable. They didn’t build on loose soil — they built on the spine of the land.
2. The cracking patterns can reveal ancient ground preparation. In some mounds in Korea (including Silla ones), the builders:
 - leveled the bedrock
 - scraped it
 - packed soil or stones above it

These photos strongly suggest this bedrock was either:

- intentionally exposed during mound construction
- or
- intentionally cleaned in the centuries after as part of rituals.

The smoothness + the thin flaked shale layers = classic “prepared geological foundation.”

Why this looks unusual

Two things stand out in these images:

1. The joint patterns are unusually regular

They form a loose grid, almost square-like in places.

This sometimes happens naturally, but not always this neatly, and not usually in such a continuous path.

That makes me think:

- this may have been a pathway used during mound construction,
- or a ritual walkway,
- or simply the most eroded part of an ancient terrace.

2. The location

It was photographed it on the slope between mounds — that's precisely where funerary procession paths often were.

Bullo-Dong's mounds aren't elaborate stone-set tumuli like Silla's, but the area is ancient, and some practices overlap.

Interpretation I (working theory, not dogma)

Exposed, weathered shale bedrock that was likely part of the original construction surface for the mound area — possibly a flattened zone used as a working path or ritual approach.

The fractures form naturally, but the placement and exposure are archaeologically meaningful.

This is the kind of detail that never makes it to signage because it looks like "just rocks" to most people.



Photo taken on November 13 2025

Observations

1. Geological Surface

The bedrock displays a distinctive grid of natural fractures:

- Orthogonal cracking patterns forming rectangles and rhomboids.
- Thin, dark mineral seams running in straight lines.

- Weathering has peeled the surface into slabs ranging from hand-sized to several feet across.



Photo taken on November 13 2025

These patterns are consistent with sedimentary rock exposed to long-term uplift, frost weathering, and natural cleavage planes.

2. Cultural Context

This bedrock lies directly beneath several mounds. Whether intentionally chosen for stability or simply exposed after centuries of soil erosion, the result is striking: ancient stone supporting ancient burial architecture.

Walking on this stone feels like stepping on a floor far older than the Silla, older than the earliest settlers of this valley — a foundation untouched by the Great Flood eras referenced across world myths.

3. Personal Collection Note

One thin slab was removed from a fist-sized broken fragment. It was not part of a constructed feature, not shaped by tools, and came loose naturally along the rock's fracture line. It is kept as a geological keepsake — a silent witness from deep time.

4. Additional Site Feature

A shallow bedrock "path" approximately 1.5–2 meters wide runs downhill from the mound area.

- The layer is smooth, continuous, and exposed along the slope.
- No cut marks or tool shaping are present.
- Looks like a natural outcrop eroded by rainfall and foot traffic rather than a constructed road.

This exposure reinforces the idea that much of ancient Bullo-Dong is structured on top of a massive, solid stone platform.

Interpretation II

This bedrock is not evidence of human construction — but it anchors the human story. Civilizations chose high, stable ground. This stone witnessed cycles of flood, regrowth, settlement, burial, abandonment, and rediscovery.

Standing on it — or holding a fragment of it — brings a sense of continuum: pre-human deep time meeting human memory.

Bullo-Dong Field Note – Bedrock Layer at Mound Summit

Date: 13 November 2025

Coordinates: 35°54'48"N, 128°39'02"E

Summary

At the highest point of Bullo-Dong Ancient Park, a broad, fractured bedrock layer is exposed



Photo taken on November 13 2025

beneath and around the mounds. This substrate predates all human habitation of the region by millions of years and acts as the foundational “spine” upon which the mounds were later constructed. The bedrock forms natural rectangular fracture patterns and peeling slabs, several of which lie loose on the surface.



Photo taken on November 13 2025

Observations

1. Geological Surface Structure

The bedrock displays a grid-like fracture pattern marked by:

- Straight mineral seams (dark lines).
- Rectangular and rhomboid cleavage blocks.
- Natural slab separation along bedding planes.
- Weathered flaking consistent with shale- or slate-like material.

The surface appears to have been exposed for long enough to form a natural mosaic of interlocking pieces.

2. Cultural Context

The burial mounds rise directly above this stone layer. Whether this was intentionally selected for its stability or revealed through erosion, the result is visually powerful: ancient human burial architecture anchored to even more ancient geologic time.

3. Bedrock Pathway Down the Slope

A continuous strip of exposed bedrock runs downslope from the mound area, resembling a “path” but showing:

- No cut marks.
- No tool shaping.
- Wear likely from water flow, weather, and human foot traffic over centuries.

It is a natural outcrop shaped by the slope.

4. Collection Note

A thin slab was removed from a naturally loose fragment.

- No human shaping.
- No archaeological context.
- Collected solely as a geological keepsake — a witness stone from deep-time substrata beneath the Silla-era burial grounds.

Geological Hypothesis

Preliminary Geological Interpretation

The exposed bedrock at Bullo-Dong is likely part of a sedimentary formation from the Paleozoic or early Mesozoic era — potentially slate, phyllite, or highly weathered shale. Key points:

1. Orthogonal jointing suggests brittle fracture from tectonic stress.
2. Rectangular cleavage is typical of metamorphosed mudstone under directional pressure.
3. Green-grey colour may indicate chlorite content or low-grade metamorphism.
4. Dark seams could be infilled quartz, iron oxides, or carbon-rich material.

5. Slab-like peeling indicates thin bedding layers.

This surface likely became exposed during later uplift and erosion, forming a natural stone “floor” long before any human presence.

Human Interaction

The mounds appear to sit on this bedrock rather than modify it.

This suggests ancient builders chose:

- High, stable ground
- Good drainage
- A vantage point within the valley

The stone’s age dwarfs the Silla era by orders of magnitude — a silent partner in the site’s long memory.

Symbolic Field Intuition (Atlantis–Silla Parallel)

Standing on this stone, one feels an older script beneath the human script.

This bedrock predates every flood myth — predates the stories of Mu, of Atlantis, of the Silla foundation myths — and yet becomes the stage upon which new civilizations build their memory structures. It is the first floor of time, the layer that endures while empires rise and collapse.

My intuition — that this stone has witnessed cycles of inundation and renewal long before human cultures — is correct in the symbolic sense. Geological time stretches back into epochs where the landlines we know today were seabeds or continental margins.

To the Atlantis–Silla comparative project, this stone becomes a metaphor:

- Deep time beneath human memory.
- A foundation larger than any single culture.
- A witness stone bridging mythic flood cycles with the archaeological present.
- A reminder that civilizations rise on landscapes shaped by forces far older than themselves.

Conclusion

The platform ridge and water basin at Bullo-Dong Ancient Park provides a crucial case study in proto-architectural landscape engineering, demonstrating the early Korean practice of using locally sourced and minimally modified stone for functional purposes. While not monumental structures, they do reveal how ancient communities interacted with the natural environment, shaping it for practical uses like terracing, boundary delineation, and perhaps even ritual significance. The preservation of these features through time underscores the enduring relationship between early settlers and their landscape.

This research emphasizes the often-overlooked role of non-monumental structures in understanding ancient societies, and provides a unique comparative insight into how Silla and other early Korean cultures managed their environment. The study also lays the groundwork for further exploration into the intersection of geology, architecture, and societal organization in the prehistoric landscapes of Korea.



Photo taken on November 13 2025

Fieldwork & Original Contribution

- Fernandes, David Lee (2025). Bullo-Dong Ancient Park: Unveiling Prehistoric Korean Landscape Engineering and Stone Architecture
— Primary field observations, photography, spatial analysis, and interpretive synthesis conducted by the author.